



Water Quantity Enhancement Activity – WQT07 – *Regional weather networks for irrigation scheduling*

Reference:

- **449 – Irrigation Water Management**
- **Plan Your Irrigation Scheduling with Daily Crop "ET".** University of Minnesota Extension Service. Minnesota Crop eNews.
<http://www.extension.umn.edu/cropEnews/2006/pdfs/06MNCN27.pdf>

Irrigation scheduling is the process of maintaining optimum water balance in the soil profile for crop growth and production. Irrigation decisions are based on an accounting method on the water content in the soil. Components of irrigation scheduling include the plant growth stage and water use, soil water holding capacity, evaporative demand and rainfall or irrigation additions. To estimate plant water use and evaporative demand factors such as temperature, solar radiation, humidity, wind and rainfall are monitored. The crop water use is known as crop evapotranspiration (ET). A potential reference evapotranspiration can be calculated based on weather conditions.

Crop ET data can be found at:

Minnesota & Wisconsin (reference) Crop ETs

http://www.soils.wisc.edu/uwex_agwx/sun_water

North Dakota Ag Weather & Crop ET

<http://www.ndawn.ndsu.nodak.edu/>

Weather information and/or ET information can be found at:

University of Minnesota Research and Outreach Center Websites.